

Pre-proposal Process
Directorate for Biological Sciences

Division of Environmental Biology (DEB)
Division of Integrated Organismal
Systems (IOS)

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Goals of Pre-proposal Merit Review Process Adopted by IOS and DEB in 2012

1. Continue to fund innovative projects
2. Make the same number of awards
(adjusted for budget)
3. Maintain portfolio balance
4. Reduce workload for external community
5. Reduce workload for BIO staff

Comparative metrics for before and after the change to pre-proposals

1. **Project metric:** COV comparison of award portfolios
2. **Awards metric:** NSF data base
3. **Portfolio balance metric:** compile proposal and award data for PI's, Institutions, career level etc.
4. **Community workload metric:** compile data for numbers of proposals, *ad hoc* reviews and panel reviews prepared and submitted, as well as preparation times and panel time
5. **BIO workload metric:** compile data for time spent requesting and receiving *ad hoc* reviews, reading proposals, preparing and running panels (travel, logistics, COIs, co-reviews, etc.), preparing review analysis and award and decline actions



EES Community Open Letter

- “We recognize that increasing proposal submissions and declining funding rates are creating undue burdens on Program Directors, investigators and the community of reviewers”
- The new pre-proposal system:
 - ***“..is slowing the pace of science...to inform solutions to tough environmental problems”***
 - ***“...does not insure that the best science is funded with the limited funds that are available.”***



EES Community Open Letter

- Over 1 year from submission to award [*actually ~ 11 months vs. 6-9 months in the previous system; over 2 years if pre-proposal is unsuccessful [4 pre-proposal opportunities per year and many other funding opportunities – SEES, MSB, EEID, CNH etc.]*]
- Hinders development of new tools and technologies [*EAGERs, DBI programs*]
- Particularly hard on Jr. Scientists trying to establish research programs [*too soon to draw any conclusions; PDs actively manage; CAREER option*]
- Hinders ability of Sr. scientist to sustain research programs [*too soon to draw any conclusions*]



EES Community Open Letter

- 4-page proposal selects against complex interdisciplinary science [*>70% of pre-proposal panelists say 4 pages is adequate for evaluation*] , CREATIVs opportunity.
- Submission limits per PI per year hinders collaboration [*too soon to draw long term conclusions; may make some adjustments*]
- Lack of ad hoc reviews limits feedback [*3 panel reviews for pre-proposals; panel AND ad hoc reviews for full proposals*]
- Former process offered comprehensive feedback and relatively quick resubmission [*John Pastor: “review quality is declining;” in the previous system (2007 – 2011) nearly 2/3 of declined proposals were NOT revised and resubmitted at the next deadline.*]



Unanticipated Positive Results

- More pre-proposal applications from primarily undergraduate institutions (PUIs) – 29% invited compared to 30% invited overall
- More EAGER awards based on pre-proposals
- Redistribution of internal workload gives Program Directors more time for scientific review

Responding to the Community

Fall 2012

- **DEB and IOS pre-proposal follow-up webinars**
- **DEB and IOS “wiki” sites: constructive suggestions**
- **Analysis of first year pre-proposal experience made public in late 2012/early 2013**
- **Revised pre-proposal solicitation for FY 2013**